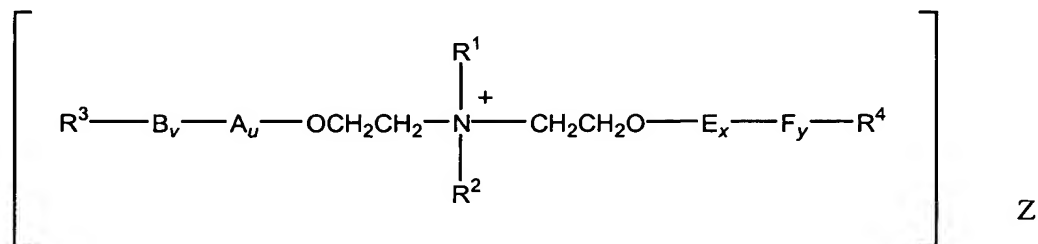


CLAIMS

1. A personal care product comprising a mixture having a pH of between about 4.0 and about 10.0 and a viscosity of between about 100 to about 300,000 cps, said mixture including at least one personal care ingredient and a diester quat having the Formula I



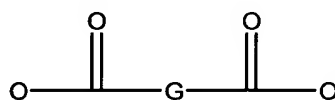
Formula I

wherein R¹ and R² are the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 22 carbon atoms;

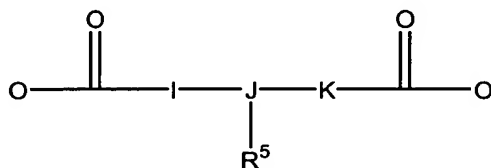
A and E are the same or different and may be ethoxy or propoxy and wherein at least one of A or E is propoxy;

u and x may be the same or different and are at least 2 and at most about 80 with the proviso that the majority of alkoxy units in Formula I are ethoxy groups;

B and F may be the same or different and are either of Formula II or Formula III



Formula II

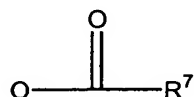


Formula III

;

wherein G is C₀ through C₃₆ groups which may be substituted or unsubstituted, saturated or unsaturated, straight or branched, alkyl, cyclic or aromatic, I and K are C₀-C₁₈ groups and J is CH, R⁵ is H or [-L-COO-R⁶] where L can be saturated or unsaturated, substituted or unsubstituted, straight or branched, alkyl, cyclic or aromatic and can be a C₀-C₃₆ group; and

v and y may be the same or different and are 0 or 1;
when v equals 0, R³ may be Formula IV and when y equals 0, R⁴ may be Formula IV

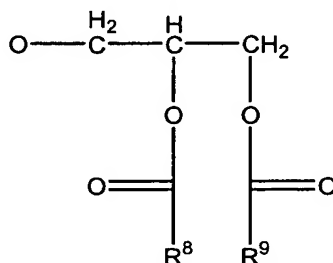


Formula IV,

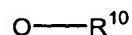
a UV protecting group having a carboxy functional group or a poly fatty acid,

R⁷ is the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 36 carbon atoms;

when v equals 1, R³ may be Formula V or VI and when y equals 1, R⁴ may be Formula V or VI



Formula V,

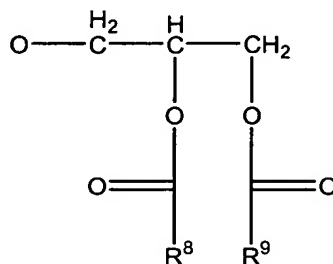


Formula VI,

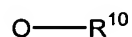
a UV protecting group ending in a reactive hydroxy group or a poly fatty acid,

R^8 , R^9 and R^{10} are the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 36 carbon atoms; and

when v or y is 1 and B or F are Formula III, R^6 may be Formula V or VI



Formula V,



Formula VI,

a UV protecting group ending in a reactive hydroxy group or a poly fatty acid,

R^8 , R^9 and R^{10} are the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 36 carbon atoms; and

Z is a counter ion.

2. The personal care product as claimed in claim 1, wherein said mixture has a pH of between about 5.0 and about 9.0.

3. The personal care product as claimed in claim 1, wherein said A or said E is an ethoxy group.

4. The personal care product as claimed in claim 1, wherein said A and said E are both ethoxy groups.

5. The personal care product as claimed in claim 1, wherein R^1 is C_1 to C_7 branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups.

6. The personal care product as claimed in claim 1, wherein R^1 is CH_3 .

7. The personal care product as claimed in claim 1, wherein R^2 is C_1 to C_7 branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups.

8. The personal care product as claimed in claim 1, wherein R_2 is CH_3 .

9. The personal care product as claimed in claim 1, wherein R^1 and R^2 are the same group.

10. The personal care product as claimed in claim 1, wherein R^1 and R^2 are CH_3 .

11. The personal care product as claimed in claim 1, wherein u is a number from 5 to 30.

12. The personal care product as claimed in claim 1, wherein x is a number from 5 to 30.

13. The personal care product as claimed in claim 1, wherein u and x are the same and are a number from 5 to 20.

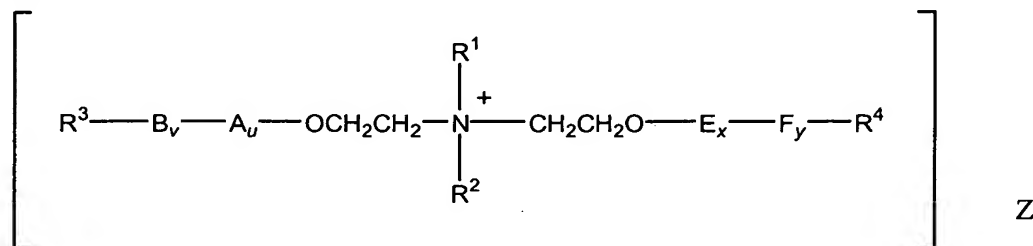
14. The personal care product as claimed in claim 1, wherein v and y are 0 and R^3 and R^4 have the structure of Formula IV and are lanolin fatty acids.

15. The personal care product of claim 1, wherein said viscosity ranges from between about 11,000 and about 300,000 cps.

16. The personal care product of claim 1, wherein said personal care ingredient is a surfactant, a quat, a solvent, a UV protecting ingredient, a fragrance, a color, a dye, an emulsifier, a humectant, a polymer or a stabilizer.

17. The personal care product of claim 1, wherein R^7 , R^8 , R^9 and R^{10} are fatty substituents.

18. A personal care product comprising a mixture having a pH of between about 4.0 and about 10.0 and a viscosity of between about 100 to about 300,000 cps, said mixture including at least one personal care ingredient and a diester quat having the Formula I



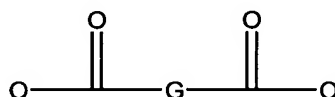
Formula I

wherein R^1 and R^2 are the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 22 carbon atoms;

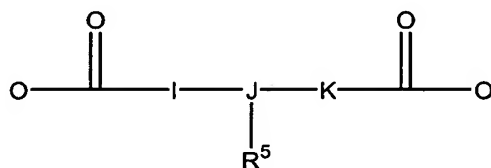
A and E are the same or different and may be ethoxy or propoxy and wherein at least one of A or E is propoxy;

u and x may be the same or different and are at least 2 and at most about 80 with the proviso that the majority of alkoxy units in Formula I are propoxy groups;

B and F may be the same or different and are either of Formula II or Formula III



Formula II

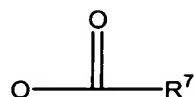


Formula III

;

wherein G is C₀ through C₃₆ groups which may be substituted or unsubstituted, saturated or unsaturated, straight or branched, alkyl, cyclic or aromatic, I and K are C₀-C₁₈ groups and J is CH, R⁵ is H or [-L-COO-R⁶] where L can be saturated or unsaturated, substituted or unsubstituted, straight or branched, alkyl, cyclic or aromatic and can be a C₀-C₃₆ group; and v and y may be the same or different and are 0 or 1;

when v equals 0, R³ may be Formula IV and when y equals 0, R⁴ may be Formula IV

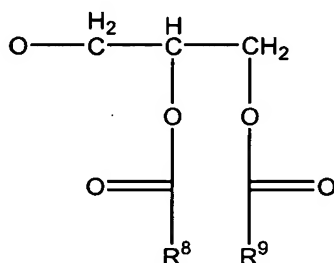


Formula IV,

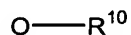
a UV protecting group having a carboxy functional group or a poly fatty acid,

R⁷ is the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 36 carbon atoms;

when v equals 1, R³ may be Formula V or VI and when y equals 1, R⁴ may be Formula V or VI



Formula V,

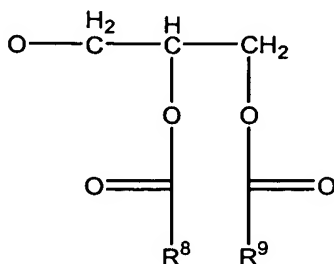


Formula VI,

a UV protecting group ending in a reactive hydroxy group or a poly fatty acid,

R^8 , R^9 and R^{10} are the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 36 carbon atoms; and

when v or y is 1 and B or F are Formula III, R^6 may be Formula V or VI



Formula V,



Formula VI,

a UV protecting group ending in a reactive hydroxy group or a poly fatty acid,

R^8 , R^9 and R^{10} are the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 36 carbon atoms; and

Z is a counter ion.

19. The personal care product as claimed in claim 18, wherein said mixture has a pH of between about 5.0 and about 9.0.

20. The personal care product as claimed in claim 18, wherein R^1 is C_1 to C_7 branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups.

21. The personal care product as claimed in claim 18, wherein R^1 is CH_3 .

22. The personal care product as claimed in claim 18, wherein R^2 is C_1 to C_7 branched or straight chain, substituted

or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups.

23. The personal care product as claimed in claim 18, wherein R_2 is CH_3 .

24. The personal care product as claimed in claim 18, wherein R^1 and R^2 are the same group.

25. The personal care product as claimed in claim 18, wherein R^1 and R^2 are CH_3 .

26. The personal care product as claimed in claim 18, wherein u is a number from 5 to 30.

27. The personal care product as claimed in claim 18, wherein x is a number from 5 to 30.

28. The personal care product as claimed in claim 18, wherein u and x are the same and are a number from 5 to 20.

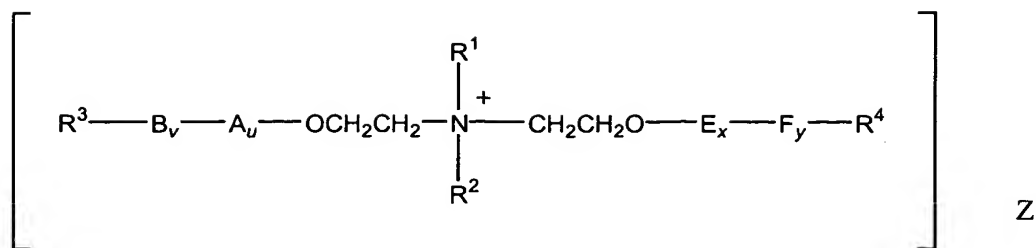
29. The personal care product as claimed in claim 18, wherein v and y are 0 and R^3 and R^4 have the structure of Formula IV and are lanolin fatty acids.

30. The personal care product of claim 18, wherein said viscosity ranges from between about 11,000 and about 300,000 cps.

31. The personal care product of claim 18, wherein said personal care ingredient is a surfactant, a quat, a solvent, a UV protecting ingredient, a fragrance, a color, a dye, an emulsifier, a humectant, a polymer or a stabilizer.

32. The personal care product of claim 18, wherein R^7 , R^8 , R^9 and R^{10} are fatty substituents.

33. A personal care product comprising a mixture having a pH of between about 4.0 and about 10.0 and a viscosity of between about 100 to about 300,000 cps, said mixture including at least one personal care ingredient and a diester quat having the Formula I

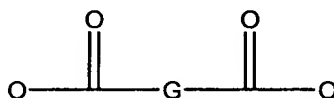


Formula I

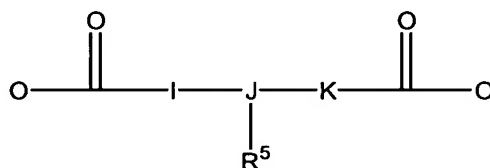
wherein R^1 and R^2 are the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 22 carbon atoms;

A and E are both propoxy;

u and x may be the same or different and are at least 2 and at most about 80, B and F may be the same or different and are either of Formula II or Formula III



Formula II

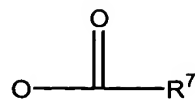


Formula III

wherein G is C_0 through C_{36} groups which may be substituted or unsubstituted, saturated or unsaturated, straight or branched, alkyl, cyclic or aromatic, I and K are C_0 - C_{18} groups and J is CH, R^5 is H or $[-\text{L}-\text{COO}-\text{R}^6]$ where L can be saturated or unsaturated, substituted or unsubstituted, straight or branched, alkyl, cyclic or aromatic and can be a C_0 - C_{36} group; and

v and y may be the same or different and are 0 or 1;

when v equals 0, R^3 may be Formula IV and when y equals 0, R^4 may be Formula IV

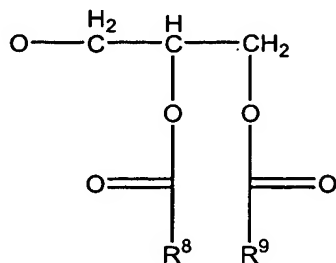


Formula IV,

a UV protecting group having a carboxy functional group or a poly fatty acid,

R^7 is the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 36 carbon atoms;

when v equals 1, R^3 may be Formula V or VI and when y equals 1, R^4 may be Formula V or VI



Formula V,

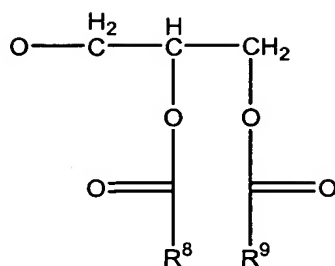


Formula VI,

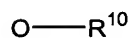
a UV protecting group ending in a reactive hydroxy group or a poly fatty acid,

R^8 , R^9 and R^{10} are the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 36 carbon atoms; and

when v or y is 1 and B or F are Formula III, R^6 may be Formula V or VI



Formula V,



Formula VI,

a UV protecting group ending in a reactive hydroxy group or a poly fatty acid,

R^8 , R^9 and R^{10} are the same or different, branched or straight chain, substituted or unsubstituted, saturated or unsaturated alkyl, cyclic or aromatic groups including between about 1 and about 36 carbon atoms; and

Z is a counter ion.

34. The personal care product as claimed in claim 33, wherein said mixture has a pH of between about 5.0 and about 9.0.